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ABSTRACT

Education in Eastern Europe's socialist countries is closely related to national development, emphasizes this report on the structure and goals of education in seven nations and two Soviet federated states. The author discusses the relationship of educational development to technical and organizational progress, changes in socioeconomic and political structures, labor force utilization, and demographic trends in the region. He examines the common principles, goals, and characteristics of education in these countries, including universality, flexibility, freedom of access, state ownership or supervision, and the provision of needed technical and sociopolitical training. Each country's educational system provides pre-primary, elementary, secondary, vocational, and higher education, the report notes, although the number of years of elementary school varies from country to country. In the final section, the report profiles higher education's tasks and projected changes, with data on numbers of institutions and students, in Bulgaria, Czechoslovakia, East Germany, Poland, Rumania, Hungary, the USSR, and the Byelorussian and Ukrainian SSRs. (RW)

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TRENDS OF EDUCATIONAL POLICY IN SOCIALIST COUNTRIES

by

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FOREWORD

Unesco's General Conference at its 19th session (Nairobi, Kenya, 1976) resolved that the Secretariat give particular attention to "gathering and disseminating information about new educational policies for the renewal of educational systems, adapted to specific needs on the basis of particular social, economic and cultural situations and aimed at promoting democratization of the systems within the framework of life-long education" (Programme Resolution 1.111).

In line with this mandate the Division of Educational Policy and Planning began in 1977 reproducing selected technical papers and distributing them as a series under the general title: "Reports, Studies ...". The aim of this series is to stimulate reflection and discussion on current issues confronting educational policy-makers, planners, administrators and school architects. Distribution is limited to Unesco officials at Headquarters and in the field, as well as interested technical personnel in governmental and private institutions. It is hoped that this series will promote and serve as a vehicle for increasing communication between individuals and institutions concerned with policy and planning aspects of education.

The "Reports, Studies ..." series consists of two sub-series : (i) papers with a subject orientation (numbered S.1, S.2, etc.) and (ii) papers focusing on a given country (numbered C.1, C.2, etc.). Subject papers deal with such topics as educational policies and legislation, planning and management techniques, planning and design of educational space and facilities, the relationship of education to productive work and employment, inter-country cooperation, the role of education in respect of the New International Economic Order, etc. Country papers are either brief profiles of the educational system of a particular country (mainly the LDCs) or treat a specific reform or aspect of the country's educational system.

Some of the papers reproduced in the series are "desk studies" based on information available within Unesco, others were originally prepared as background or discussion papers for a meeting or seminar, while still others are personal position papers representing part of a continuous dialogue within the Unesco Secretariat.

Papers are selected for the series on the basis of their topical interest. Readers should bear in mind that many, if not most, of the papers are <u>working documents</u>, unedited and not intended for public distribution. Some of the authors have written in a language other than their mother tongue, which explains certain linguistic deficiencies. It must also be stressed that the papers present the ideas of their respective author and do not necessarily reflect the policies of Unesco.

The Division of Educational Policy and Planning welcomes comments and suggestions concerning the series and invites readers to make known their reactions to particular ideas presented or to entire papers. In certain cases it may be possible to reproduce such comments and reactions in a subsequent issue of the series. For the convenience of readers who may wish to contact the author of a paper, the current contact address is given whenever possible.

AVANT PROPOS

La Conférence Générale de l'Unesco, lors de sa 19e session (Nairobi, Kenya, 1976) a décidé que "la collecte et la dissémination de l'information sur les nouvelles politiques d'éducation pour le renouvellement et la réforme des systèmes d'éducation adaptés aux besoins spécifiques basés sur des situations sociales, économiques et culturelles particulières et qui ont comme objectif la démocratisation des systèmes dans le cadre de l'éducation permanente" (Résolution 1.111 du programme) se situent parmi les objectifs prioritaires de l'Organisation.

Conformément à ce mandat, la Division des politiques et de la planification de l'éducation a entrepris en 1977 la reproduction et la distribution de certains documents techniques, sous le titre général de "Rapports et Etudes ...". Cette série a pour objet de stimuler la réflexion et les discussions portant sur les problèmes courants auxquels doivent faire face les décideurs, les planificateurs et les administrateurs de l'éducation ainsi que les architectes scolaires. La distribution se limite aux professionnels du Siège et hors-Siège, ainsi qu'aux personnels d'institutions gouvernementales ou privées susceptibles de les trouver utiles pour leur travail. Nous espérons que cette série constituera un moyen pour promouvoir et augmenter la communication entre les individus et les institutions concernés par les différents aspects des politiques et de la planification de l'éducation.

Ces "Rapports et Etudes ..." se divisent en deux catégories: (i) les documents qui traitent d'un sujet (numérotés S.1, S.2, etc.) et (ii) les documents qui traitent d'un pays (numérotés C.1, C.2, etc. Les premiers portent sur des sujets tels que les politiques et la législation de l'éducation, les techniques de gestion et de planification, la planification et l'étude des espaces, constructions et équipements éducatifs, la relation entre éducation/travail/emploi, la coopération entre les pays, le rôle de l'éducation par rapport au Nouvel ordre économique international, etc. Les seconds présentent des profils du système éducatif d'un pays donné (principalement les pays les moins développés), ou traitent d'une réforme ou d'un aspect spécifique du système éducatif du pays concerné.

Certains des documents reproduits dans cette série sont des "desk studies" basés sur des informations déjà existantes à l'Unesco, d'autres ont été préparés à l'origine pour servir de documents de base ou de discussion à des réunions ou séminaires, alors que d'autres encore, exprimant les positions personnelles des auteurs, se situent dans le cadre d'un dialogue permanent au sein du Secrétariat de l'Unesco.

Les documents sont choisis pour cette série en fonction de l'actualité du sujet traité. Les lecteurs doivent tenir compte du fait que beaucoup, sinon la plupart, des documents sont des documents de travail inédits et ne sont pas destinés au public. Certains auteurs ont rédigé ces documents dans une langue qui n'est pas la leur, ce qui explique certaines faiblesses linguistiques. Nous voudrions également souligner que les documents expriment les idées de leurs auteurs respectifs et ne reflètent pas nécessairement la politique de l'Unesco.

La Division des politiques et de la planification de l'éducation souhaite recevoir des commentaires ou suggestions au sujet de la série, et demande aux lecteurs de bien vouloir faire part de leurs réactions à certaines idées exprimées ou à des documents dans leur ensemble. Dans certains cas, il sera peut-être possible de reproduire ces commentaires et réactions lors d'une prochaine parution de la série. Les adresses des auteurs des documents sont indiquées afin de donner aux lecteurs qui le désirent la possibilité d'entrer en contact avec eux.

TRENDS OF EDUCATIONAL POLICY IN EUROPEAN SOCIALIST COUNTRIES

The present paper discusses functions of education in a socialist country, general trends and strategies of the development of all levels of education in the European socialist countries.
The final part evaluates the achieved level of educational development in the analyzed countries and enumerates problems, particularly in higher education, which should be solved in the future. They are the problems undertaken by the European socialist countries in their educational plans for the years 1981-1990.

I. TRENDS IN NATIONAL DEVELOPMENT DETERMINE EDUCATIONAL GOALS

Socio-political, governmental, and cultural changes plus certain demographic conditions and trends in the economic development of the country, were the main determinants in designating the goals in educational development during the entire post-war period in the European socialist countries. These also established the rank and role of education in each country. These issues will be discussed in turn in the fundamental points of this chapter.

2. Role of education in a socialist society

1. The modern development of European socialist countries witnesses two characteristic features in the area of employment: increasing professional activity in the population, concomitant with an ever greater number obtaining an appropriately higher level of education. This is due to the fact that, with the development of science and technology, professional jobs demand higher educational levels, while people enjoy a higher standard of living, who have more leisure time, desire a better cultivated existence, wish to become more familiar with their surrounding world, and to be able to more fully realize their personal happiness. In this case, education becomes a condition and factor in the country's economic growth, and the development of the individual which is determined by his education, becomes the source of personal satisfaction and the socio-cultural development of the nation.

The relationships and interdependencies that exist between the socio-cultural development of the nation and the development of education are especially significant in a socialist society. Socialism by definition is built by the people and for the people. It causes an ever livelier activation of wider sections of the population and creates better living conditions, conducive to their all-round development.

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Socialism demands the full participation of the entire population in the cultural and social life, political life, in representative bodies guaranteeing a voice in government - all of which are the basis for a democratic socialism.

Through the development of education, socialism compensates for negligences existing in the past, levels social inequalities, and for the first time in history incorporates on such a large scale, the diversity of social interests with the interests and good of the individual. This diversity is particularly evident in the place of employment which provides society with qualified workers while at the same time it gives the individual an opportunity to perform a job for which he is prepared and likes. A similar convergence of interests occurs in the relationship between the individual and society and government. Force and processes of making people subject make way for the conscious will and personal involvement. With conscious directing and social development, where the system of directives and rigor are loosened in favor of reasonable behaviour and deep ideological motivation, education should prepare the entire society for achieving professional and social goals, while also activating the abilities and talents of individuals, resulting in their comprehensive development.

Education played a particularly significant role during the entire post-war period which saw the growth of the European socialist countries. Social and economic progress was reflected in the development of culture and education, which was a decisive factor in the building of socialism in each country. In recent years socio-economic growth and an improved standard of living have created new conditions and given rise to more ambitious goals in education. The vision of building a developed socialist society requires that such attitudes be formed in young people that will bring about the realisation for over-all societal goals. Education should produce people that will strive toward bringing about prosperity for all through better jobs while at the same time it should satisfy the ideals and needs of the individual in light of socialist humanism.

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2. SOCIO-ECONOMIC AND DEMOGRAPHIC FACTORS

Goals in the socio-economic development of each country and demographic factors should affect education in such a way as to result in the flow of properly trained and educated people into the economy and culture, having acquired the necessary social and professional requirements. It is obvious then, that the proper training of personnel becomes a significant factor influencing the dynamics of socio-economic growth and the event of delays or diverseness of goals - may result in set backs in the dynamics of socio-economic growth.

The main purpose of education therefore, is the realization of social development of the nation both in a perspective view and over and beyond that. Objectives in the economic development provide the economic basis and conditions for realizing the long-term social programs. During the process of implementing economic policy, such transformations occur that afford the most useful utilization of means allocated for the comprehensive accomplishment of social goals.

On the other hand the educational system comprises an important part of the complex program for social development in each country; while also being a determining factor in the achievement of economic development because it trains qualified personnel for the appropriate professional structure needed to implement social and economic goals. Therefore the educational system must be seen as a fundamental condition to the growth of modern day civilization and economic growth, as well as being instrumental in shaping society's life style and consumer model. The socio-economic development of the country and the personnel being trained for realizing this development should take into account the following factors :

- scientific-technical and organizational progress evident in the scientific-technical revolution in the economy which is the mainspring for the nation's growth and development;

- modifications in the country's socio-economic structure particularly in up-dating production and properly encompassing the entire country, as well as utilizing natural resources with environmental protection in mind;

- a full and sensible utilization of the labor force by training and educating the population in the productive age group during particular periods;

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- international economic cooperation, especially the economic integration of socialist countries as well as specialization on the basis of a world division of labor and collaborating with the world economy. Familiarity with projected demographic growth is imperative for education because these projections indicate:

- the general dimensions of goals in education, given the numbers for age groups involved in the education process,

- the general amount of influx of youth into the job market after completing their education,

- the structure of a given age group, thus facilitating the planning of goals in education as regards self-improvement and raising the level of learning in the population,

- periods of a demographic low, which can become an incentive to improving the quality of education.

Numbers in a school/age group may even influence the choice of strategy in education, so as to provide an optimal flow of the new generation, so as to provide an optimal flow of the new generation into employment. Classes falling into demographic highs, with their concomitant problems for education, will not encourage education officials to prolong the obligatory period of schooling. While on the other hand, the period of a demographic low may lead to competitiveness in learning and employment, and in the final outcome encourage the seeking of new solutions in education, that will intensify learning and perhaps combine learning with working. Finally data regarding the amount of qualified personnel expected to enter the job market is a significant consideration in planning capital expenditure, selecting techniques on the basis of labor consuming methods in production and services and may also be helpful in planning such social policies as for example, reduction of working hours or fixing the retirement age.

In the overall balance of personnel, not only changes in the general scope of employment are accounted for, but likewise changes in the level of education among the population and in their professional configuration.

Anticipated changes in the structure of employment are particularly important for education as regards its growth and modernization. This pertains to the forecast drop in the population professionally employed in agriculture, forestry, mining/sectorI/, changes forecast in the manufacturing and construction industry/sectorII/, and especially pertaining to the rise of employment in services / sector III/. The actual and planned possibilities in education determine the effected transformation of the employment structure through the influx of new classes of graduates

or through the self-improvement of those who are already professionally employed.

General prognosis as regards the scope of educating and employing qualified workers may be expressed in regional terms, based on the biological projection of the population both with and without the migration factor. In order to plan the future of education network, it is imperative to know both sets of figures, and thus be prepared to provide an adequate educational system which covers all needs from pre-school to higher education.

3. OTHER DETERMINANTS TO THE DEVELOPMENT OF EDUCATION

Aside from familiarity with demographic forecasts and trends in the socio-economic development of the country, there are numerous other factors in the development of education to be considered - to name a few of the most important ones:

- the growth of science and technology, besides being fundamental force in the development of the economy, culture and remaining areas in social life, also exerts a significant influence on education. In order to grow, science and technology must have educated workers, not only having a certain amount of education but also with a diversity of professional specialization. Achievements of science and technology will be socially useful only if the national economy and culture are filled with specialists, capable of implementing these achievements, thus converting them into true mainsprings of social development. The educational system should facilitate the realization of both of these objectives, emerging from the general development of science and technology. Here one may add that effect of education's labor is the proper application of new techniques that will have no determinal effects for man's environment, his health, and the psychological and social by-products of a scientific-technical civilization.

- changes in the social structure have a real importance for the functionning of education. Every social formation created its own educational system, reflecting the interests of the ruling class. In planning the future objectives for education, there should be an awareness of social changes taking place and future social structures, as well as familiarity with the demands which will be set before education. The social structure of a developed socialist society will above all require the full implementation of the principles of democratic education. The school system can lead youth on to the path of

thinking and learning techniques that are indispensable in a socialist society. Education can and should impart the art of social co-existence. It also changes the internal structure of the working class, transforms employment in agriculture and above all, changes the professional structure of the intelligentsia, modifying its social function. Therefore changes in the hierarchy of objectives must reflect methods which will prepare people for these functions and positions as dictated by the conditions of a political and governmental socialist economy.

- political changes and international cooperation also present challenges to education. The political education of citizens, preparing them for an increased participation in representative bodies and various forms of self-government will always be the responsibility of education. On the one hand this involves the presentation of ideological, legal and economic knowledge regarding a socialist government and its functionning, while on the other hand it means that the educational system must also instruct citizens about social forces which influence these and possible ways and means of improving them. Education should prepare one not only for actively participating in one's own community, but also for international contacts. The school system should produce specialists capable of being involved in broad international collaboration and should also give every citizen the opportunity to comprehend principles of cooperation and the country's international policy.

4. PRINCIPLES OF EDUCATIONAL ACTIVITY

When establishing objectives and trends in education policy, pedagogical social, political and along side of these, economic needs should be taken into consideration.

It should be emphasized however, that the organizational structure of education in a large measure determines how challenges that confront the entire educational system will be met. For this reason, the organization of education should be planned in such a manner as to allow for the following :

- universality - to provide each child with the opportunity for approaching the highest levels of education in accordance with his talents and diligence;

- full passage - which binds individual rungs on the "educational ladder" forming an internally cohesive whole;

- flexibility in education which ensures each pupil the necessary conditions for optimally developing his personality by a wise, individual approach from the didactic quarter. This principle entails the appropriate guidance of both, poor and talented students as well, and necessitates the introduction of diversified curricula and alternatives in the organization of didactic responsibilites;

- educational and employment pre-orientation which gives the opportunity to discern one's talents and affinities at a relatively early stage, and the chance to try them out in the properly organized educational activities;

- broad scope of general education which provides in a flexible manner for the proper utilization of workers with proper qualifications, to satisfy production, social and cultural needs, present and in the future as dictated by the scientific-technical revolution;

- continuity of education requiring systematic and institutionalized education and self-improvement after completion of school, for workers in various categories. The educational process therefore, cannot be considered closed at any point, and requirements facing graduates of various schools should be raised in preparation to their later roles in the socio-economic life of the country.

- functionality, i.e. the methods and means used to achieve designated objectives in the educational system should not produce directly opposite side effects;

- internal cohesiveness - to liquidate overly high barriers and didactic and organizational requisites between different types of schools and levels.

The factors listed demand a policy in which:

- the educational system will be inclined to intellectually activating society and influencing the moral development of its younger generation. The discovery and development of talent in youth places a particular responsibility on the educational institution, involving methods, forms and organization of the schools activity;

- a further democratization of the school system, eliminating the negative results of selective schooling. Consequently the educational network and its administration which determines the accessibility for all groups of youth in accordance with their interests and talents, is of such major importance;

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- the school will be able to properly achieve its goals. This applies equally to the content and methods as well as to the material in infrastructure and properly qualified teaching staff. Combined they should trigger intellectual exertion, stimulate creative interests and activate the personal development of the individual.

5. INTERDEPENDENCE OF ALL LINKS WITHIN THE SCHOOL SYSTEM AND INSTITUTIONS OUTSIDE THE SYSTEM

The determining factors in the development of education as were presented above, pertain to the national education-embracing all links within the school system and also institutions outside of the system. Only the correlation of functions and objectives within the entire school system, combined with the cooperation of outside institutions can in effect bring about the realization of the general objectives of the national education system in a socialist society.

In the educational system, a special responsibility rests with the final link in the system, higher education. Its activity affects the lower rungs in the system and its final product - the highest qualified specialists. Therefore it is necessary to investigate the problem of higher education within context of the entire school system, outside institutions and general socio-economic factors which determine the role that trends in educational development play in the national economy and culture.

6. EDUCATIONAL POLICY AND PLANNING OBJECTIVES

Education affects millions of citizens, employs hundreds of thousands of teachers and aids, and absorbs enormous financial and material resources in every country. This entire sphere of social activity must be skillfully organized and planned. And this is the purpose of educational policy. This policy determine the overall objectives of education and also the material and financial resources that can be allocated for this purpose. In the end, result, optimal choices are made considering the prevailing conditions in the given country, and termed the educational strategy. This strategy assumes the selection of designated objectives and priorities which in effect shape the school system and determine its scope and power in reaching society.

In the planned economy of the socialist country, the objectives of education constitute an integral part of the national plan for the economic-social development of the country. As opposed to the planning of the economy, educational planning has certain characteristic features. Basic to it is the "horizon of time" in planning educational objectives. Educational planning should go beyond the scope of immediate economic goals and train personnel which will be needed in the future. In the case of planning educational development, effects of decisions are evident only after the passage of several years and reflected in the actual socio-economic state of the country. Effects of decisions pertaining to the lower rungs in education are seen even later. From this, the fundamental difficulty in educational planning arises, namely, to bring about the convergence of objectives in educational planning with objectives in economic and socio-cultural planning.

The elongated "horizon of time" in educational planning - irrespective of long-term planning - involves a series of educational forecasts and analyses. An analyses of the entire educational system, of its individual links and components cooperating with the educational system/parallel education; continuing education, the role of organizations and community

environment, the function of the family, mass media, cultural institutions etc./ makes possible an evaluation of the actual state and the drafting of desirable changes in trends, guided by the general goals and objectives of the educational system. Based on such analyses, numerous forecasts regarding the development of education can be prepared. Moderate and long-term projections are continually modified and improved, being in effect the basis for planning the national education policy. At this time it should be emphasized that there is a continual need to improve the methods of accomplishing analyses, forecasts and educational planning. In contrast to what happens in the national economy, these assignments are charaterized by consequences and effects that become visible only after a longer period of time, and involve quantitative and qualitative aspects felt by the entire society as well as by the individual.

Even more complex is the issue of planning the qualitative effects of education. In planning the economy, usually quantitative indicators of development are employed while any qualitative improvement is brought about as a result of the world level of production technology. In planning the growing objectives in education, usually an improvement in the quality of education is assumed, although the broadening of educational objectives incurs the risk of lowering the level of education. Always however, the most difficult problem is the matter of measuring the quality of education and selecting criteria to make these measurements. It is generally maintained that the school system and the policy for its development are judged by their contribution to the development of the national economy and culture, by the results of the work of qualified personnel groomed by this system, and also by the socially experienced feeling of having individual needs for education satisfied. In no way does this change the arbritary nature of the choice of methods for evaluating the effectiveness of the educational system in all areas of education that are periodically evaluated.

An equally complex matter is the problem of planning quantitative and qualitative objectives in education, is the issue of foreseeing the choice of new organizational structures and methods for realizing educational goals. Quantitative changes in education require new organizational solutions and different methods, in order that education does not lag behind the progress of science and technology and all the other consequences that this progress creates in the socio-economic and cultural life of the country. Therefore the need for incorporating self-controlling and self-adapting components into the educational system, which

will be sensitive to changing conditions within education, is commonly being recognized. Implementation of such views is especially hampered by conservative educational institutions, which up until now have been very slow in reacting to changes in their professsional objectives and working conditions.

7. GENERAL CONSIDERATIONS

The function of education in a socialist society entails varied objectives for the educational system in the area of preparing working people to meet any demands in various spheres of the socio-economic and cultural life, as also in the area of preparing youth for social life, for participating in the culture of the country and in satisfying the individual needs and aspirations of individuals in society. Consequently, education in a socialist society fulfills a special function. Three groups of objectives can be found in its basic activities.

1. The need for qualified personnel in the national economy and culture. This need results from the trends to date the current stage of the socio-economic development of the country. Satisfaction of this need is a condition to the success of future development goals. It is the responsibility of the school system to prepare personnel of such professional structure and education as to guarantee the satisfaction of immediate needs and assure the prudent management of human resources in meeting distant, long-term objectives. It is imperative therefore, to safeguard the proper proportion between individual professional groups in the general career structure of the society in such a fashion, that the personnel being educated may be properly utilized in filling immediate needs and also be dynamically involved in future trends in the socio-economic development. Actually the school system should educate personnel much ahead of the time that the need arises for them to fill immediate gaps in the national economy and culture for qualified workers. The crux of the matter lies in the fact that in order to define for the educational system much ahead of time, these needs for such professionally qualified people, a system and method of education should be created that will with a degree of flexibility react to the changing demands for qualified people as indicated by the socio-economic needs. The school system should always educate with an eye to the achievements of production technology, thus being an innovator and harbinger of progress

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for the entire national economy and culture. However the content should be general so as to permit certain adjustments and specializations in future professional jobs and enhance merger with later education, which might result from ensueing stages in scientific development or from the change of specialization or even career.

Since one of the features of a socialist economy is the principle of full and reasonable employment, the school system should be flexible so as to play a deciding role in training qualified workers in accordance with actual needs of the national economy and culture, and should stimulate these needs as indicated by planned trends in scientific and social development ; it should make self-improvement and professional adjustment possible, considering the changing level of science and technology which can result also in changing professional needs in the work process.

2. The socio-political function of education comprises the next group of considerations which determine the dynamics and trends in learing. In a socialist society the educational process must insure not only the desired professional structure of the population, but must also fulfill many other functions. One of them is the shaping of consciousness and socio-political principles.

All socialist society should be conscious of its goals and objectives and actively participate in the management process and common decision--taking on the nation's and country's future.

Consequently the need for the full, active participation of society not only in the work process but likewise in the political and cultural life of the country. The whole socialist society should be aware of its goals and objectives and actively involved in the process of management, being codeciders in the future fate of the nation and country. There is therefore the need to prepare individuals for filling their role as citizens, participants through numerous representative bodies in the codecisions affecting the country's future, of developing socialist standards of social co-existence and strenghthening the foundations of socialist democracy.

A socialist society provides the richest possible opportunities to benefit from the national culture and the same time, offers the chance to actively contribute to its development. Education therefore not only has

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the function of preparing society for its future professional needs, but has, a no less important meaning in the process of preparing the population for socio-political and cultural life. It becomes a significant instrument in realizing a socialist country's socio-political function, forming, aside from professional qualifications, motivations within the individual in the socialist society. In view of this, the ideologically formative function of education takes on a particular signficance.

3. Individual needs of society for consuming education increase as the level of education in that society and the standard of living rises. It can be surmised that these needs will continue to grow not only because of the professional needs of the individual, but mainly because of the desire to consciously glean current knowledge and to participate in the country's socio-political and cultural life. Therefore, the desire to study within the school system or in outside institutions will remain constant, appearing in all segments of society. It can even be maintained that higher their educational level, the higher will the educational aspirations of parents be. The education of their children constitutes a significant element in parental aspirations and their prestige within the community. It can be expected therefore, that as the educational level of parents will rise, at a geometric rate at that - so will the social need for education increase. When this demand is satisfied, a societal feeling that in a broad sense human needs are being met will decidedly emerge and will become the key of achieving a socialist model of consumption. Because in the area of education, general social interests are in tune with the interests of the individual, there is a striving in social policy of socialist countries to satisfy the educational needs and aspirations of each individual in a socialist society.

It is a known fact that educational needs always exceed the realistic ability to fully satisfy them, even in the wealthiest of nations. The question arises, how to develop education and shape its ultimate model in order that most of the material and human resources assigned to education will be best utilized. This problem is of particular interest during the period of the scientific-technical revolution in a socialist economy.

Some are of the opinion that regardless of the numerous special characteristics and specific factors found in the socio-economic development of a country, the level of educational development should equal the level of the former. For this reason, notwithstanding other objectives and needs,

currently it is commonly maintained as never before, that there is an urgent need for research and for making international comparisons in the field of education. Considering the climate of detente in international relations and that various political systems are striving for peace, such cooperation carries all indications of success. The need for educational research is also prompted by the desire to improve the educational system in each country without exception, due to the dimensions of resources and challenges to be dealt with, and because of the constantly changing conditions in education occurring in every nation. Such an exchange of experiences and conclusions can be useful and fruitful in terms of international cooperation as well as in terms of the general strategy for educational development in each country. International cooperation in the field of education, science and culture may be very significant in affecting the atmosphere of international detente, peaceful cooperation and friendly relations between nations. Education for peace as emphasized by the UN vote and UNESCO resolution becomes a great educational idea, preserving the dignity and identity of nations, united in mutual respect and cooperation.

II. GENERAL CHARACTERISTICS OF EDUCATIONAL SYSTEMS

All educational systems in socialist countries, irrespective of their distinctive features, chiefly organizational and curricular, are based on common fundamental principles.

Namely :

1. All levels of education in the school system are free of charge; costs of running schools of all types and levels are covered by the central budget and regional budgets, and also by industrial organizations and financially autonomous institutions.

2. Education is state-owned/private education is allowed but under state supervision; for example in Poland there are some private secondary schools and the Catholic University in Lublin.

3. Primary education is widespread and illiteracy has been eliminated; for example in the USSR, in 1917 there was 75% illiteracy, while among minority nationalities it approached 100%; only 6% of the population in Kirghiz could read and write, 5% in

Tadhikistan and 7% in Turkmen; 40 nationalities found within the boundaries of the USSR did not have their own written language. In Poland in 1945, 3 million citizens were illiterate/. Presently all European socialist countries are aiming to make secondary education /II level/ universal.

It is commonly accessible. Mass education is the norm.

4. Education above primary school level/ i.e. above the I level is subject to central planning. This is a result of:
   a/ a planned economy, which is a major binding principle in a socialist country;
   b/ a social policy that aims to broaden as much as possible access to all rungs of education and insures each citizen the fundamental right to be employed according to his qualifications.

5. Educational systems have free passage, i.e. there are no "dead end streets",from each rung it is possible to pass on to the next higher one. Also, obtaining the certificate of maturity in a vocational school/ which has many liberal arts subjects/ does make further, higher education possible in any major/ in some socialist countries however, it is necessary to select a major comparable to the emphasis carried through secondary schools/.

6. All rungs in education are based on democratic principles evidenced by their being:
   - common available
   - widely accesible
   - free fo charge
   - and having a broad social policy/ a well developed system of scholarships, dormitories and student hostels, cafetarias and student health policies/,

   but most importantly, catering to youth from educationally neglected environments.

   Socialist pedagogy puts into practice the belief that talents are equally distributed throughout all social groups. This is particularly applied to higher education with its liberal access for youth from labor and agricultural environments. As an example : Of those accepted for first year graduate studies in European socialist countries, there are the average approx. 50% of the

of the students coming from labor and agricultural families. Before World War II /1939/ in Poland for example, there were only 14,5% of these while in Hungary barely 3-4%. Considering that prior to World War II, higher education was elitist and in those countries which are now the European socialist countries, it was underdeveloped/ with the exception of the USSR which had been already building socialism for over 20 years and implementing the educational revolution/, today's situation of mass education, and the high percentage of youth from labor and agricultural families, are proof of a democratic higher education.

7. All socialist countries conduct parallel to regular education/for youth/, education for working people. It has several functions:

a/ compensatory/particularly evident during the first two decades following World War II/,manifested by giving access to all rungs of education to those various reasons could not avail themselves of regular, day education;

b/ complementary intramural education, especially higher education could not satisfy+ ambitious to achieve ever higher qualifications through education, in the face of immense personnel needs of the national economy and culture and the newly awakened educational ambitions of a socialist society.

c/ democratic - implementing the belief that in a socialist society there are no closed careers, that the educational system serves to fully develop people comprehensively, and therefore every person who desires to be educated can become so, regardless of which stage in life he is presently at or whatever his motivations.

Education for the working person/particularly higher education/, has become a permanent feature of the educational system in socialist countries. Recently, higher education for the unemployed reflects a tendency toward a markedly varied organizational and curricular structure/for example in Poland there are evening courses, correspondence courses, the latter being for example courses for teachers, supplemented by radio and T.V. lectures, sandwich courses combined regular and correspondence courses, combined correspondence and evening courses organized at the place of employment and extramural courses which are gradually being discontinued.

+ the demand for staff and satisfy

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III. PRESENT STRATEGIES OF EDUCATION

The achieved level of the socio-economic growth gives to the socialist countries opportunity to pass from the stage of intensive quantitative increase of trained specialists to that of qualitative development. This is due to the fact, that achievements of education in the post-war period allowed to satisfy basic demands for staff with all types of formal qualifications. Therefore, emerged a possibility to realize the main task of education, which, in a socialist country, is comprehensive development of human personality.

In this aspect, in particular socialist states occur changes of various intensity, which consist in up-bringing people for the development, through formation of right ethical values giving high rank to human labor, emphasizing knowledge of principles of self-character formation and directing one's own development thanks to a continuing educational activity.

All this contributes to changes in educational strategies at various levels of education.

Pre-primary education in socialist countries serves children aged 3-6. It has become well-developed and universal due to educational tasks fulfilled by its institutions and to high professional activity of women in these countries. A fundamental principle of social policy in a socialist country is protection of family. In consequence, pre-primary education is universally accessible and tends to serve all children. Pre-primary schools are partly paid/ approximately 20% of the costs, covered by the state, of maintaining a child in such institution/.

In U.S.S.R. each child has a place in a pre-primary school. In Bulgaria Czechoslovakia, Hungary and G.D.R. demographic conditions allow to cover all children with infant education. In Poland, some 96% of needs for places being particularly severe in rural areas. Still, all children aged 6 have in Poland access to this kind of education. Their one-year long stay in infant school/in Poland 7-year olds start primary education/ serves, apart from various up-bringing functions, the purpose of preparing children to school. Therefore, the final class in pre-primary school has important role in levelling children's readiness to systematical learning.

In Romania, all population of children aged from 3 to 6 will be covered by infant education probably by 1980.

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In all analyzed countries, pre-primary schools increase their educational tasks and maintain simultaneously their original fostering functions. This is due to/the growing educational maturity of children resulting from higher level of culture of a society, better educated parents, development of mass-media/mainly of television, films and books for children/. This is also consequence of necessity to intensify educational processes leading to transfer certain tasks traditionally connected with primary school to infant schools.

Young children, while staying in infant school with peers from various families, get better prepared to live in the world and society, get to know basic ethical values, learn to express correctly their ideas, read simple texts, learn basic calculations, etc.

Infant school teachers are usually trained in special secondary and post - secondary schools.

In Poland, there is a policy to employ persons having pedagogical or psychological higher education on managing posts in pre-primary schools.

In U.S.S.R. there is an Institute for Pre-primary formation of the Academy of Pedagogical Sciences.

Elementary education is not organizationally separated in the structure of primary schools/ which are compulsory in socialist countries. Elementary training takes three years and constitutes an organic part of primary school. Primary schools have generally 8 classes regardless of specific features of school systems in particular countries.

In the countries/U.S.S.R., Romania/ where 10-year schools are obligatory, systematical training takes 5 years/after 3 years of elementary instruction/. After having completed 8 years of training pupils can continue studies in a 10 - year school /U.S.S.R./ or in a lycée/Romania/. 8 - years of training are a sufficient basis to start instruction in a professional school. 2-3 years of study in this type of school give worker qualifications, 3-4 professional middle qualifications and maturity certificate. Professional secondary schools secure access to higher studies.

Completion of 10-year school in U.S.S.R. gives the right to apply to university or to continue education in technical schools/1 - 1,5 years/.

Remaining socialist countries have an intermediary link between compulsory and higher education; there are gymnasia in Bulgaria and Hungary, lycées/uniform in Poland and of two cycles in Romania/, and secondary

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schools 2nd cycle/erweitere Obeschule : in G.D.R.

Secondary schools are of general character and prepare youth to university studies. Some of them have a distinct profile/specialist gymnazia in Hungary or 2nd cycle of Romanian lycée can have the following profiles: industrial, industrial-agricultural, economic, administrative-legal, mathematic-physical, literary-historical, natural medical and pedagogical/.

Vocational education is widely spread in socialist countries. There is also a remarkable trend to disseminate vocational secondary education as a result of growing requirements with regard to qualification of employees and of growing educational aspirations of youth.

For example, in U.S.S.R. more than a half of vocational schools give full vocational secondary education and award maturity certificate.

Vocational education in the analyzed countries gives its graduates opportunity to continue studies; in Poland, for example, 3-year vocational school leavers/having worker qualifications/can continue their studies in 3-year technical secondary school.

Social policy of socialist countries strives to disseminate secondary education. In Soviet Union this process has been finished. Other socialist countries systematically enlarge access to full secondary schools, and this trend is a basic principle for educational strategy for the years 1990-2000.

In most countries young people attend school at least 10 years. In Poland 96% of primary school leavers continue education at least in a 3-year basic vocational school, which gives minimum 11 years of training.

Several countries lanched a reform and the 2nd level of education; they strive to provide wider access to post-compulsory schools. Various countries realize the reform in different ways: Poland and Hungary broaden profile of general education; G.D.R. and Czechoslovakia strive to more distincly professsionalize certain schools at the 2nd level; Romania and Bulgaria tend to give wider profiles of curricula in such schools.

Spreading secondary education strengthen interest of youth in continuing formal education.

Socialist countries establish therefore post-lycee studies of vocational character/still, they are not institutions of higher education/. Such studies are particularly well developed in U.S.S.R/technical schools on the basis of 10-year secondary schools/, in Poland/2-year post-lycee studies on the basis of 4-year general lycée/.

A new phenomenon in the education of the discussed countries is setting up vocational higer schools/fields of study/with shorter cycles of education/ of 3 years duration/. They are mainly technical/G.D.R., Hungary (1) .
It is to be expected that this trend of the development of higher education will continue. Most higher studies last 4-6 years and are of academic character in all socialist countries. In Soviet Union and Poland there is no other type of higher education.

(1) Poland/, and pedagogical studies/Romania, Hungary

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All levels of education in socialist countries tend to emphasize the meaning of the modern educational technology. In teaching, a variety of technical teaching media is used, including computers in higher schools. Sometimes computers are also used at lower rungs of education.
Mass-media, mainly television and radio, are widely used in education. In the Soviet Union, various television systems are used in extra-mural studies/ closed -circuit television/. In Poland there are : Radio Television Secondary School and Television Agricultural Secondary School. Both institutions' work is based upon school premises where some lessons/consultations, laboratories, control of knowledge/ are held still a fundamental part of instructional process is realized through radio and television. Also in Poland since 1974 there is Radio-Television Teachers University which cooperates, as for organization and curricula are concerned, in up-grading scientific and professional qualifications of working teachers without higher education who will be employed in 10-year general school which has been introduced in Poland since 1978.

It should be emphasized once again that education of the employed has, in the socialist countries, long traditions, and is an important source of their educational achievement. In the U.S.S.R. the system of education the employed from the struggle with illiteracy to university studies/was established just after the Revolution. In other socialist countries it dates from the years after the 2nd World War, and although some forms of correspondence and extra-mural education are older they did not create a unified system. From their very beginning, socialist countries considered education to be a particular, autonomous value serving development of each individual. Larger requirements for staff due to the 2nd W.W., intensive industrialization and urbanization, removing negligencies of previous socio-political system stimulated development of all levels of education for the employed. Now, this type of instruction is a fixed element in systems of education in socialist countries. Studies for the employed are an important element of democratization of education and of training personnel at all levels of professional qualifications.
It largely contributed to several pedagogical innovations, for example those concerning methodology of handbooks/Poland, G.D.R./, utilization of mass-media/Poland, U.S.S.R., Czechoslovakia/, widening networks of educational institutions, etc.

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In the present circumstances, education for the employed is an important element in forming system of life-long education.

In consequence, this type of education is an example of open-educational careers of people who want to learn and develop their personality regardless of their original level of education, their social condition, age or motivation. Students of 2nd and 3rd levels of education for the employed confer certain material and social advantages/paid leaves for training, prizes for good results in studies, reduced transportation fares to school, possibility to use social base, etc./, This makes that access to evening or extra-mural higher studies is limited and controlled by educational authorities. However those limits are high/ 30-50% of all students in a given country/. Therefore, candidates to higher studies for the employed are obliged to take a competitive entry examination/still, entry examinations are not obligatory to lower rungs of education for the employed/. Though, the admission system is not uniform; in Poland, for example, a principle of recommending employees to higher studies by their employing institution/within the framework of limits of places assigned in particular fields of study to the institution has been spreading since 1975.

It can be generally said that thinking of securing employment adequate to education for all graduates and with regard to a planned character of the socio-economic policy of development in socialist countries, admission to higher studies/full -time and for the employed/take place through competitive examinations, number of places is limited/according to manpower demand of labor market/. Recent years witnessed in some socialist countries certain symptoms of saturation of some economic sectors with highly educated specialists. This results in fixing number of recruitment to the first year of studies and in changes of proportions between particular fields of study.

IV. CONCLUSION

Our considerations show that school system should take into account development tendencies of society and at the same time be an important factor of the continuity of growth and its historical stability. Is it possible to construct such model of education ? To what extent will it actually be able to satisfy needs of society and facilitate its future development ? These questions should be answered in the course of considerations on improvement of a model of education. The considerations on the future of education make

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us strongly believe that in the future the school system will improve and evolve similarly to other social institutions. The actual stability of solutions regarding educational systems will have to undergo considerable changes The future education should be capable of self-adaptation and improvement in the changing socio-economic conditions. Presently a new doctrine is required from educational institutions. In the past obliging was the principle of "fixed specialization". In consequence of the scientific and technological revolution, a "new idea of a principle of maximum adaptation" to changing conditions in result of socio-economic and cultural growth is born. Therefore, generally accepted is the conception that the school system should guarantee comprehensive education both general and professional, and specialization should be acquired in job and can change along with the changing technical and technological conditions. This is an additional argument for necessity of changes in the actual doctrine of education and in the functioning of educational institutions. This principle has an essential meaning for the work of institutions from outside of a school system; it puts in different light the part played by employees as it stresses the necessity of life-long education in the place of work or in relevant institutions outside of the school system. The adoption of the above doctrine of education and additional training requires constant change of forms, methods and content ofeducation corresponding a stage of development of technology and economy. A need for comprehensive training of all categories of employees will remain a basic criterion of education; as it makes possible further learning, facilitates change of profession and specialization, favors innovations in work and education. The correctness of this thesis is proved by the contemporary theoretical studies supported by empiric examples and by experience of several countries.

A question arises whether in the future education will develop at the same rate as up-till-now ? and what factors will determine the need for higher studies ? These and similar questions disturb the representatives of the authorities supervising and managing the work of institutions of higher education, academic teachers and students. But these issues are considered also by economic, political and cultural activists. The public opinion waits for the most rational solutions matching the needs and the directions of the country's development, its present and future society.

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At the same time it is well known that in higher education, like in all national economy and culture, a special role will be assigned to research on the base of which this level of education should be improved and directions of its further growth traced. What are then the most urgent tasks in improvement of higher education activity ? and how should it develop in the future ?

5.1. Aims and tasks of higher school in the future

Formulation of future educational goals of higher schools while taking into account foreseen consequences resulting from the socio-economic growth, should put greater stress on the following functions of such school:

a/ Higher school - apart from transmitting knowledge - concentrates its efforts on formation of the socialist personality/ i.e. creative, ideological and active/ in its graduates.

b/ Training of specialists aims at preparation of the professionals able to adapt to the changing requirements for qualification in a trained profession.

c/ Higher school is a place of research and of training research staff for all region. It is also a transmitter of scientific personnel to other sectors of science.

d/ Higher school actively and comprehensively cooperates with national economy and culture on solving the present and prospective tasks resulting from plans and programs of national and regional socio-economic growth.

e/ Higher school provides various forms of additional training and improvement within the framework of life-long education, is open to its environment and region.

For demographic reasons and with regard to social targets and circumstances of the future economic growth it is to be expected that in the future professional careers will last on average longer, the yearly working time will be shorter and work effectiveness will remarkably grow. This structure has various consequences for functionning of the system of post-compulsory education. It induces shortening of tne time of stationery training of adults. This would be possible if the following circumstances were satisfied :

a/ Stationery higher education is an intermediate not a final stage in training of adults. Therefore some blocs of programs can be compressed as they can be systematically renewed in the succesive phases of life-long education.

b/ Training for the changing needs of professional specialization takes place mainly in course of professional life or through solving research tasks for production, services and national culture.

c/ Higher school provides graduates for the national economy and culture formed in a variety of ways : Students should have therefore opportunity to :

- quicker acquiring of knowledge giving opportunity to chose from a variety of professional specializations,
- be able to change specialization on even profession several times during whole professional life,
- have motivation return/coming back/ to university for post-graduate studies in various stages of professional career.

Institution of higher learning gathers youth mature in many respects to play independent social roles who search ways to liberate their energy and thoughtfulness in acts personally satisfying. Spreading motivations of ideological attitude and personal involvement among students willing to the advantage of shaping the desired personality models of future employees and will conduce to the successful course of studies. A prerequisite condition of conducting such program is increase of practical, non-verbal instruments of formation of attitudes through larger participation of students in university management including self-evaluation of educational and research results and realization of curricula.

Academic education must also assume determined social tasks fulfilled by remaining chains of educational sector of equating opportunities of generations who had left schools with lower qualifications. Their creative activity will contribute in the same degree as activity of younger generations to the future development of economy and culture.

Abandoning too narow training of specialists capable to assume, directly after studies, work in strictly determined profession for broader preparation giving possibility of quick adaptation to the changing needs for qualifications and life-long education would result in the transfer of some parts of the material which now are content of study programs to the period after completion of studies - either during adaptation to new work or within the framework of post-graduate studies. This gives chance to shorten the time

of higher studies and to better than previously train graduates to their future tasks.

The farthest consequence of the proposed changes would be reduction of higher school tasks consisting in transmitting knowledge in the course education and replacing them with new organizational and teaching solutions which favor shaping in students skills of self- dependence in formulating problems this would be possible if previous stages of education assured student basic knowledge, awakened and shaped his interests, habits and abilities to independent learning. Possible is also quite different conception of training students independently from traditional professions and specialities, of education based on blocs of disciplines corresponding to various groups of later professional training. Such solutions will make possible further individualization of studies and flexible transfer of students between fields of study, institutions or even types of schools. This also makes possible interdisciplinary studies, and flexibility in satisfying new demands for professional preparation, and first of all search for new and bold solutions. Adoption of such conception of training in a higher school provides more advantageous conditions for shaping during the studies creative, active and ideological personalities. This means that in the structure: content-forms-methods, the attention is mostly paid to forms and methods, with taking for granted considerable differences in knowledge of facts possessed by graduates of one field or speciality of study. The presented conception provides favorable conditions for both individualization of curricula and inclusion of students into university research. In its ideal form it gives motivation to study defined blocs of subjects or rather of sections of knowledge, as a means to solve determined tasks resulting from educational process. Still, this requires radical changes in personnel and material base of higher education, and first of all in habits and attitudes of research and teaching staff.

Further discussion of this set of problems seems now too early. On the other hand it seems necessary to pay attention to an important question raised more than once in the previous discussions on future conceptions of higher school, that it can be assumed that the youth approaching threshold of higher school will be adequately trained to the studies conceived in such way and whether in practice the youth will not have to be prepared to them/now the process of preparation being realized in the first stage of the present system of academic studies/.

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The decisions concerning directions of changes and improvement of the national system of education in socialist countries are based on thorough and comprehensive scientific investigations. The investigations include the works on implementing adopted solutions and serve the purpose of further improvement of a future educational system. The investigators are assisted in their work by experience and conclusions from realization of the programs of the development of education in other countries. A wide exchange of information, common research and broad international co-operation are an essential condition of success in realizing the national programs of reforms and transformation of the national educational systems. The co-operation among the socialist countries serving the above aim includes : the continuing co-operation among pedagogical institutes carrying investigations on the first and second levels of education and on education of adults, co-operation among institutes for higher education concerning the strategies of development of the third level of education and of live-long education.

Problems of co-ordination and exchange of information pertaining to educational policy are tackled by the periodically held conferences of the ministers of learning of socialist countries, conferences of the ministers supervising the development of vocational education and biennal sessions of the ministers of higher education of socialist countries.

4.1. Bulgarian People's Republic (BG)

In 1966/77 Bulgarian higher education had 26 institutions with 103 662 students (including 75 079 - 72.4% - full time students). In recent years it has been a subject of considerable changes aiming at integration of research activity with teaching tasks.

These changes gave birth to establishment of research and didactic centers in Bulgaria. The first one originated from integration of the works of the Sofia University and the relevant institutes of the Bulgarian Academy of Sciences.

The New Academy of Medical Sciences combines four medical universities (Sofia, Plovdiv, Varna and Pleven), the Institute of Improvement of Physicians and other national research institutes of medicine.

Institutions of higher education are in the period of transition from faculty to institute organization. Institutes which are large teaching and research units facilitate contacts with research and experimental institutions of the national economy.

The concentration of the potential of institutions of higher learning and other research centers made possible more rational utilization of all

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scientists and scholars, of material resources of schools, research and industry institutes for education of highly qualified staff. The research potential could be thus concentrated on realization of tasks connected with science and implementation of great importance for the social and economic growth of the country.

The development of organizational structures of higher education provoked evolution and modernization of contents of curricula. Apart from that, reviewed were aims of some fields of study traditionally taught in universities.

New fields of study were established meeting better demand of the developing economy.

At present, there are 180 specializations in Bulgarian higher education and still larger concentration of education and specialization of particular institutions is needed.

In instructional process great importance is attached to student activity and self-dependence. Student scientific movement develops incessantly. Universities pay considerable attention to pedagogical research aiming at improvement of educational and character building process. New methods of increasing student activity are worked out along with broad use of technical teaching media; works on computer assisted instruction, and on use of computers in university management and in educational research are carried out. A new method of programming recruitment to higher studies with the aid of computer is currently under preparation.

The recruitment to higher studies is based on competitive entry examinations. The number of places is limited according to the forecasts of demand of labor market and didactic opportunities of a school (number of faculty members, laboratories, material and social infrastructure). In the last 5 years the number of applicants to the 1st year of study did not change considerably, so schools can pay greater attention to the improvement of quality of educational process.

Institutions of higher education have appointed new collective managing bodies, so-called "general assemblies", at the level of a university, faculty and institute. The collective bodies existing up till now (so called academic councils - equivalent to senates and faculty councils) have been enlarged by representatives of faculty members without scientific degrees (lectures and assistants), student representatives and representatives

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those enterprises and institutions for which the school or the faculty train the personnel.

Principal directions of works of higher education in Bulgaria concentrate at present on the following themes:

- greater effectiveness and quality of all spheres of higher education ;
- improvement of teaching and character building activity (maily through increasing activity of academic environment, heightening the rank of social sciences in curricula, modernization of educational contents and methods);
- concentration of research on issues important for the advancement of science, national economy and culture;
- improvement of teaching staff employed in institutions of higher education;
- modernization of management and organization of universitities;
- broadening material basis of higher education.

4.2. Czechoslovak Socialist Republic (CS)

In 1976/77 Czechoslovakia had 36 institutions of higher education attended by 168 310 students (including 130 249 full-time students, i.e. 77.4%).

The reform of Czechoslovak vocational education resulted among others in larger numbers of secondary vocational school leavers with certificates of graduation, and consequently in larger numbers of applicants to higher studies. The number of working students is growing fast - compared to other socialist countries, studies for the employed were still a weak point of the Czechoslovak educational system (in 1970 working students constitued 19.5% in 1972/73 - 16.5% and in 1966/77 -22.6%). A small participation of studies for the employed in the educational policy had the following reasons: well developed secondary vocational schools did not award their leavers with maturity certificates so considerable part of young people found jobs directly after their completion (tney were employed as qualified workers or middle professional personnel); special demographic structure of the country; higher education fulfilling sufficiently socio-economic demand for highly qualified staff. New educational tasks (generalization of the second level education) made educational aspirations of the society grow; new priorities have been set up (for example providing higher education for teachers). In consequence, enlarging access

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to higher education for the employed has become an important element of the Czechoslovak educational policy.

At present, works are conducted on new models of specialities in higher education according to the actual socio-economic needs and perspectives of development of CS. They focus on three basic domains:

- betterment of social preparation of graduates to their future professional and social environment;
- increase of theoretical knowledge giving opportunity of quick adapatation to new professional requirements resulting from the rate of the scientific and technological progress;
- ability to use theoretical knowledge in practice (wider programs of practices during studies).

Improvement of instructional process has the following directions: methods of planning and management of instructional process have scientific foundations (research results); methods increasing learner's activity; participation of students in research activity of departments and universities; increase of students social practice . Great importance is attached to the individual and group work with gifted youth.

Adoption of the principle of unity of character building, teaching and research results in necessity of development of university research linked with educational process. With this aim establishment of common scientific and didactic centers and broadening the scope of co-operation in this field between institutions of higher learning, institutes of Czechoslovak Academy of Sciences and the centers for industry research and implementation are planned.

In 1977/78 in most fields of study started new programs prepared by specialists from universitites, scientific institutions and economic enterprises. Having modernized programs of study the experts concentrated their efforts on improvement of contents of subjects taught in institutions of higher education and on ensuring an appropriate course of instructional process through provision of adequate handbooks and teaching aids. Czechoslovak universitites pay traditionally considerable attention to technical teaching media. Their equipment is co-ordinated in the country by the "Comenium" specialized educational technology center.

Post-graduate studies are treated as an indispensable element of proper functionning of the educational system and as prolongation of higher studies. They provide graduates with continuous educational

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activity, contact with progress of science and remarkable achievements of technology and organization. Therefore, the stress is put in CS upon further development of post-graduate studies according to the present needs of the scientific and technological progress.

The Presidium of the Central Committee of the Czechoslovak Communist Party and the Presidium of the Federal Government analysed the situation of higher education in Czechoslovakia compared to the development in other socialist countries, and decided that accelerated growth of this level of education is required. The political and state authorities of CS therefore recommend that in 1985 enrolment to higher studies covered not less than 15% of the youth age group. Bearing in mind the mentioned above development of studies for the employed and post-graduate studies, in 1981-85 considerable growth of higher education can be expected. The proportional development of the material basis of higher education financed with the means of the state budget and of economic sectors should follow the mentioned growth.

In the federal system of Czechoslovakia there are two ministries of education: the Ministry of Education of the Czech Socialist Republic and the Ministry of Education of the Slovak Socialist Republic. At the Federal level of their work is co-ordinated by the Vice-Premier of the Federal Government. At present, both Ministries work on a project of new act of higher education.

Works related to the modernization of the higher education system concentrate in Czechoslovakia on the following tasks:

1. Orientation of higher education works on meeting socio-economic needs of the country.
2. Systematic improvement of educational contents and modernization of higher school structure and forms and methods of pedagogical work, up-grading of quality of vocational and ideological-political training of university graduates.
3. Improvement of the system of post-graduate studies and up-grading level and growth of university research.
4. Wider use of university scientific achievements for the scientific, social and economic development of the country.
5. Taking all opportunities of higher education to increase access of youth and adults to higher studies and to meet the growing educational aspirations of the society.

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4.3. German Democratic Republic (DDR)

In 1976/77 higher education in the German Democratic Republic had 54 institutions with 130201 students (including 101 155 -78% in full-time studies).

In the improvement of instructional process in G.D.R. stress is put upon student activity and creativity; from the first year students are given concrete tasks to solve in student construction bureaux, organized are competitions during industry practices which are part of curricula, exhibitions of their achievements, etc.

In the character building process, teaching ideological subject accompanies student activity in student brigades of work and in the Socialist Union of German Youth.

Academic staff in co-operation with representatives of the economic sector revised curricula in institutions of higher learning. Since 1970 new plans of study have been introduced into 62 fields of study comprising 280 specializations. Having determined new plans of study which meet the socio-economic needs of G.D.R. works were undertaken on new curricula for particular fields of study. These works were finished in 1976.

According to the principle that plans and programs of study should be improved because of fast progress of science and technology, the works in this domain aiming at obtaining higher level of graduates concentrate on the following problems:

1. Education in fundamental, social and specialist disciplines and introduction of new fields of knowledge into curricula.
In technical studies 65% of time is devoted to basic natural and technical sciences.
2. Up-grading of theoretical level of studies through better theoretical and methodological preparation of students.
3. Linking theory with practice. Attention is paid to the organization of student practices based on acquired theoretical knowledge. Social sciences (obligatory for students of all fields of study) are reinforced by 10-12 week social practice of the 3rd year students ; the practice together with general social activity of students is an indispensable factor of preparation of graduates to their future social and professional life. Professional practices last longer too (for example. Students of engineering have together one semester of professional practice.

4. Development of student independent scientific work (projects diploma theses) organized in a variety of forms, still closely connected with the curricula. In the academic year students have some time off for their self-dependent research activity.

Considerable financial means are provided for the modernization of material infrastructure of higher education. Technical teaching media, particularly closed-circuit television, are now general in institutions of higher education. New academic handbooks have been prepared for basic disciplines; handbooks of foundations of Marxism-Leninism, chemistry, political economy, electrotechnique and medicine have already been published. Modernized was also clinical base for medical students, namely the Charite hospital complex of the Humbolt University in Berlin. In 1976-1980 the number of teaching places will probably grow by 13-15 thousand and the number of places in students canteens by 8-9 thousand. University libraries (such as Deutsche Bücherei in Leipzig and Deutsche Staatsbibliothek in Berlin) are being enlarged.

In 1969 considerable quantitative growth of higher education was achieved in the G.D.R. as 10 engineering schools were transformed into engineering higher schools. They train engineer directly for a job in industry where they do not have to adapt for long periods of time to the profession. Instructional process in professional engineering higher schools is largely based on practical exercises, laboratories and on solving tasks connected with student future work. The schools employ mainly the staff - with great professional experience.

During the whole 7th semester students of enginnering higher schools have professional practices.

In the beginning, education in engineering higher schools ended after the 7th semester. Students worked on their diplomas as extra-mural students. Now, after having completed the semester of professional practice students get back to the schools. In the 8th semester they have specialist classes and solve one problem of the school complex of research tasks. Its solution is at the same time their diploma work which they present and defend before the comission. After successful defense they are awarded with the degree of engineer with diploma.

Engineering higher schools have a system of admission different than other institutions of higher learning.

In the German Democratic Republic, unlike all remaining European socialist countries, there are no competitive entry examinations. The qualifications process is made by secondary schools which give recommendations, together with the score on secondary school graduation examination are the base of decisions taken by the regional qualifying commissions - which, according to the availability of places determined by the regional planning

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bodies - on recommending every candidate to higher studies i.e. to an institution and field of study.

In 1975, the authorities decided to organize introductory practices (from 5 to 12 month long) before studies. The practices are obligatory for all candidates to medical, economic engineering and agricultural studies. During the practices students can take some examinations obligatory on the first year of studies, acquire qualification in operating specialist instruments, etc.

To higher engineering schools are admitted first of all those applicants who have completed vocational studies or specialities corresponding to those of their future studies, i.e. who have worker qualifications. They are often employed in industry and have great professional achievements. Those who have completed general secondary schools and have been employed for some time, or 10 year polytechnic school, can be admitted to special preparatory courses organized by **engineering** higher schools; successful completion of the courses gives access to the schools. This is an important element in the German higher education as it assures promotion for leading workers through appropriate training. The best graduates of **engineering** higher schools distinguishing themselves by ability to research work can be recommended by school authorities to complementary studies in academies (universities and technical universities).

The chances in the German full-time studies (professional and academic were accompanied by the changes in correspondence studies. The main principle of correspondence studies, like in all European socialist countries, is that their quality should be equal to that of full-time studies.

In admission to correspondence studies in G.D.R., preferences are given distinguished workers and demobilized soldiers who have completed secondary education. The admission is made centrally by the department of correspondence studies of the Ministry of Higher and Vocational Secondary Education.

Considerable attention is paid in G.D.R. to preparation of handbooks for this type of studies. Basing on long experience in this domain and adequately to the changes in correspondence studies curricula, prepared were new types of so-called didactic exercice-books (Lehrbriefe) and methodological instructions (Studienanleitungen).

Aiming at the continuous improvement of correspondence studies the following issues are managed centrally:

1. Management, co-ordination and control of teaching process.
2. Network of consultation centers for correspondence studies.
3. Planning and distribution of instructional materials for correspondence studies.

The development of variety of forms of higher studies requires corresponding development of the faculty.

The following table presents the current conditions and development of the faculty in the German higher education in 1970-1975.

Year	Total number	Teachers			Research staff
		Together	Professors	Ass. Profes.	
1970	50 248	4 621	2 125	2 496	16 598
1975	58 844	5 276	2 443	2 833	20 652
% 1970-75	117.1	114.2	115	113.5	124

Every year 3 000 persons are awarded with the degree of doctor, the number fulfills demand for this kind of staff of higher education and research centers.

The number of assistant professors (dozenten) who can give lectures, seminars and conduct diploma works and research is still considered too low. It is to be expected that in 1976-80 the number of assistant professors will grow approximately by 16%.

Every five years professors and assistant professors are given a year leave for carrying research or for scientific practice in other German or foreign universities.

Research works are planned centrally. The present plan covers the years up to 1990, it is divided into 5-year periods - according to the national system of social and economic planning. Within its framework institutions of higher education have 285 research themes, including 180 themes in co-operation with universities of the U.S.S.R. By the estimations of the Ministry of Higher Education of G.D.R. some 90% of diploma works made by students are connected with research plans of universities.

German higher education concentrate its works upon the following subjects:

1. Greater attention will be paid to linking fundamental seiences and applied research with social and economic growth of the country.
2. Improvement of student political training.

3. Greater responsibility of the faculty for student education, character building and research.

4. Improvement of faculty members through:

a) intensifying exchange of experience between faculty members in order to achieve higher quality of pedagogical process and research.

b) greater effectivity of Marxism-Leninism training teaching staff.

c) improvement of pedagogical training of teaching staff (actually relevant experiments are under way in selected universities; generalization of this form of improvement of teaching skills of the faculty is foreseen to the year 1980)

d) up-grading scientific qualification of teaching staff

e) increase of number of specialists with scientific degrees

f) providing opportunities for greater employment of women as faculty members.

5. Development of research in institutions of higher education

6. Development of post-graduate studies which are a necessary element of higher education serving continuous improvement of graduates of variety of schools.

Now in the German Democratic Republic, research and academic workers, students and representatives of the national economy discuss a model of German higher school in 1980-1985. These works are inspired to a great extent by the Higher Education Institute in Berlin subordinated directly to the Ministry of Higher and Vocational Secondary Education.

4.4. The Polish People Republic (PR)

In 1976/77 Poland had 89 higher schools, attended by 491 030 students (including 300 948 at stationery studies, that is 61,3% of the total number). In 1978 one more higher technical school was called to life (making the total number of higher schools to be 90).

In 1979, after 35 years of existance of the People's Republic of Poland (1944-1979), the millionth diploma was awarded to a higher school graduate.

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The number of higher school graduates in PL changes in respective periods according to following trends:

Years	Total[x)]	Including: Graduates from stationary services
1945-1977	932 337	676 672
1945-1950	35 933	35 933
1951-1955	125 976	116 985
1956-1960	85 592	70 433
1961-1965	105 301	80 787
1966-1970	175 915	114 648
1971-1975	279 650	180 480
1976	51 295	33 031
1977	80 700	45 200

x) Graduates completing their studies for a master's degree (II cycle of studies) not included.

A particularly dynamic growth of education occured in the seventieths- as during 1971-1877 circa 444 thousands of graduates left Polish higher schools.

The dynamic industrial development of PL (and this process may be observed in different degress of intensity in all European socialist countries) resulted in that a considerable part of the higher school potential was directed at the formation of engineering cadres. In recent years the need of the national economy for engineering cadres appears to be met. Consequently the interest of the young people in this type of studies is declining.

The Polish policy of education, issuing from the social and economic national policy, is presently aiming at intensifying the formation of specialists in the fields of agriculture (the so-called "agocomplex"), food industry, branch economics, and the teachers formation (performed by higher pedagogic schools, universities, and - on a limited scale - by other higher schools, preparing teachers for vocational schools).

In consequence the structure of graduates according to various types of Polish higher schools is as follows:

Type of higher school	1945-1950	1951-1955	1956-1960	1961-1965	1966-1970	1971-1975	1976
	in %						
Total	100,0	100,0	100,0	100,0	100,0	100,0	100,0
Universities	48,0	25,9	17,4	24,0	27,5	29,5	31,0
H.technical schools	19,2	30,4	39,0	31,5	32,6	33,1	30,4
Academies of agricult.	3,3	7,6	11,9	9,2	10,5	9,1	11,1
Academies of economics	18,7	13,4	7,1	7,4	10,5	7,6	8,2
H.schools in pedagogics	1,5	3,7	2,8	4,9	5,4	10,1	6,6
Academies of medicine	6,6	15,8	16,1	17,9	9,7	6,2	5,3
Academies a.higher schools of phys. culture	1,2	1,4	2,5	2,2	1,9	2,3	4,5
H.schools of arts	1,5	1,9	3,1	2,8	2,2	1,6	1,9
Others	-	0,1	0,1	0,1	0,1	0,5	1,0

The policy of enrolment is suited to such structure of graduates. The selection of candidates to higher studies in PL is based on entrance examinations of competitive character. The number of places at particular fields of study is limited.

The limits are allocated to particular higher schools (according to educational capacities of each institution: number of scientific cadres, of didactic accomodations, the schools specialization, and depending on the regional demand for qualified cadres). The candidates, which passed the entrance examination with success in 2 major disciplines and 1 foreign language may be awarded - and this is the specificity of the Polish system of enrolment - supplementary points of preference. But these preference points are valid after obtainment of a positive credit of the competitive entrance examination.

In 1977/78 were admitted candidates at the first year of studies according to the following structure (in %):

Universities	- 29,6
higher technol. schools	- 29,2
Agricult. academies	- 13,3
Academies of economy	- 7,7
Higher schools in pedagogics	- 8,2
Academies of medicine	- 6,2
Other higher schools	- 6,0

Following data illustrate the interests of candidates in particular subjects of studies: in 1977 three hundred candidates competed for 100 places at the universities (including: law -440 candidates, political sciences - 400, pedagogics - 520, psychology - 400); for every 100 places in higher technological schools competed 180 persons.

During the period of 35 post-war years, the system of higher education in PL was subject to various modifications of structure and of programmes caused mainly by national demand for qualified manpower.

The quality and quantity development of the scientific cadres is constantly object of care in PL. The dynamics of this process of development may be pictured as follows:

Specification	1962/63	1970/71	1977/78	% of growth
Scientific-didactic staff	17 741	28 944	51 296	176%
Including: professors and assistant professors	3 094	5 949	8 071	203%

From 1976 on, scientific degrees (two such degrees are in existance in PL: the doctor of science and the doctor habil.) are awarded yearly: to circa 3,5 - 4,0 thousand persons the doctor's degree and to circa 700 persons the degree of doctor habil.

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Since 1968 courses for post-graduate students are run in two forms: a 3 years duration stationary study (with a regular grant equal to an average salary of an assistant employed at a higher school) and post-graduate studies for persons employed, and delegatei by tne employing establishment (for the 3 years period and an average monthly salary, as well as for volonteers with non-limited strictly time of duration.
By principle before acceeding at the stationary post-graduate study has to be preceeded by at least 2 years of professional work. From this requirement may be exempted particularly apt to scientific work graduates from higher schools.

From 1960 on started systematic pedagogic retraining (streamlining) courses for academic teachers. In 1976 was enforced for all newly employed academic teachers the obligation of completing a post-graduate pedagogic course of 2 terms of duration (with additional didactic and educational practice, directed by an assistant professor or a professor).

In Poland emphasis is put on the point that the calling of an academic teacher is bi-professional, that is that it requires high scientific qualifications in a given discipline and equally high pedagogic competences. That the reason why the perfectioning of the didactic skill is permanent and it concerns the whole didactic cadre of higher schools. It takes place in form of regular pedagogic conferences, organized by the higher schools (faculties, institutes).

A correct development of higer education is conditioned to a great extent by the level of scientific research, that, not witnstanding its autonomic values, influences directly the quality of the didactic process.

The higher education concentrates 60% of the national scientific potential (including 70% of professors and assistant professors). Following data show the degree of development of scientific research in Poland: in the years 1971-74 the financial value of research work executed in higher schools amounts to circa 2 milliards zl. In 1955 the funds allocated to scientific research in higher schools amounted to 37,5 mlns zl., and in 1970 - to 449,9 mllns zl (which is tantamount to a sixtuple growth of expenditure during 15 years). These sums indicate the dynamics of growth: in 1971 the funds for scientific research in higher schools totalled 1.826,6 mllns zl., in 1975 - 5.564,2 mllns zl., and in 1977 -6.290 mllns zl.

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Scientific research of particular importance is controlled by central authorities, by way of:

7 government programmes (e.g. housing construction, health protection, coal processing, utilization of proteins in food etc.);

67 crucial problems (e.g. development of methods and devices of plastic working, machining and abrasive treatment, and chem-milling; management, organization and spatial planning in national economy; education and instruction and cultural and social development of PL);

60 international problems (mainly in the fields of basic sciences);

54 branch problems (of importance to a given area of social or economic life, e.g. improvement of the didactic and educational process in higher schools).

In practice this concentration of research on selected topics conditioning further proper national development and that of particular realms of social and economic life and of science -proved to be highly effective. Such an organization of research favours close and authentic contacts of science with social economic practice and promotes the self-financement of a major part of scientific research.

From 1960 on a series of structural changes have been introduced in Polish higher schools.

At present the basic organizational unit of a higher school is the didactic-scientific institute, corresponding by its profile, by principle, to a scientific discipline. Most frequently the institutes are subordinated to faculties, but some particularly staffed ones, of an individualized scientific profile (e.g. the Institute of Psychology at the Warsaw University) are self-dependent units as to the didactics, scientific research and awarding scientifing degrees, and subordinated directly to the rector (president) of the university. Inter-faculty institutes are set up for these disciplines that are in existance in most lines of studies (e.g. political science).

During a decade of operation, the new structure of the higher school, based on big organizational units - the institutes, focused on the didactics and scientific research in the area of a single scientific discipline, proved to be entirely correct.

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Parallel is progressing to self-governing activity of students and scientifc workers. By way of example: the award of both scientific degrees (of doctor's and doctor's hab.) comes uniquely within the competence of the scientific community, state of administrative organs have no capacity to interfere. Another example; the student community is qualified to take independent decisions concerning the major part of social services (grants, places in students' homes, in rest houses, trips abroad etc.)

At present the tasks of higher schools focus on following problems:

1) Improvement of the enrollment to higher studies. Many investigations and tests were performed in this field. They are aiming at the elaboration of a multifunction system of selection of candidates (tests of secondary school results, the opinion of the secondary school as to the aptitudes of the candidate to academic learning, secondary-school certificate, personal background etc.); such system - based on standardized techniques of measurement -would help to take decisions prognostic to a maximum concerning the admission to higher studies. The elaborated measurement techniques and all the enrolment system shall be implemented in higher education by degrees.

2) Modernization of the didactic process, mainly based on achievements of modern technology of education. Polish higher schools went through a phase of an extensive material modernization of the didactic environment. At the same time work is embarked upon preparing the academic didactic staff to the use in pedagogic activity of the means of the technology of education. In order to attain this goal, for teachers, beginning their academic career of laboratory of technical didactic means with elements of methods of their use is being organized.

3) Activities are under way, aiming at bringing closer higher education with the process of working. This leads not only to the modernization of the system of education for the employed (brought in Poland into effect in 1949) but also to originate many valuable didactic innovations.

In the pedagogics of socialist countries great importance is attached to educational and instructional values of correct organization of work. At the same time account is taken of the fact, that the material basis of a part of industry and that of prominent farming units exceed in modernity to equipment of higher schools laboratories. Besides the development of the system of education in a socialist country is matter of interest of the whole community involved. In this context the growing educational functions of the industrial and agricultural sectors are examined.

These concepts are realized at several planes:

a) an approach assumes the expediency of basing a part of the didactic process on the facilities of the industry and the agriculture, that is of making use of the modern material equipment of these sectors and of highly qualified specialists employed there to educating students, and particularly to organize long-term (up to one semester) professional practices;

b) recurrent studies ("sandwich courses"), experimentally launched in 1973 by the Warsaw Technical University and the Polish Car Factory ("Polski Fiat") at Zeran-Warszawa are being developed; the positive results of this experiment led to a prompt development of recurrent ("sandwich") studies, mainly at technical and agricultural higher schools. It is expected that in the future circa 25% of students will by studying in such way.

c) launching first courses of stationary and correspondence type (i.e. students employed are being delegated for certain periods of time by their employing enterprizes, with their monthly average salary retained, to stationary studies; this applies to those parts of stationary studies, where laboratory work on unique apparatus in existence in higher school is requisite, to graduating terms etc.);

d) organizing in co-operation of higher schools with industrial establishments of courses, run on the premises of the establishments (i.e. when the didactic process has to be closely related to the technological process, and when this condition is not realizable in the higher school, courses on the premises of an industrial establishment are organized; such is the case e.g. in the factory great power-station turbines "Zamech" in Elblag).

4. The higher education in Poland is on the point to become a mass education, and the growing aspirations of the Polish society and the needs of the country for highly qualified cadres generate the necessity, in controlling the progress of higher schools system, of wide scientific research, taking account of various aspects of the system's functionality; from a correctly structured set of candidates to higher studies, through improvements of didactic and instructional processes, regular development of scientific cadres, growth of scientific potential and modernization of the material basis of

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education, to the control of process of rational employment of graduates and their future progress through a system of post-graduate studies, being in constant development, and the system of permanent education, coming presently into being.

All the research on higher education, its multiple requirements, functions and relationships is put in charge of the Institute of Science Politics, Technical Progress and Higher Education and of the Polish Academy of Sciences. The said Institute is subordinated directly to the Minister of Science, Higher Education and Technology. It pursues research work on its own capacity and co-ordinates and finances many programmes in higher education, conducted in higher schools and in research institutes. At present its efforts are focused on the future model of higher education.

5. Work pertaining to the model of the future higher education is, from 1977 on, the main problem, concentrating the attention of the whole scientific community.

The system of national education entered in Poland the phase of fundamental structural and programme reform. From 1978 on began the implementing of the 10-years grammar school, general and obligatory/at present the obligatory school is of 8 years duration). Every year one obligatory form of the 10-years system will be put into being, so that the process of implementing the 10-years education will end in 1988. All other forms of education, including the higher education, will be organized on this basis.

It is expected that the work aiming at building the model of future higher education will come to an end in 1980. No single legal instrument in performing this reform of higher education is anticipated. This education will evolve along definite lines, so as to attain circa 1990 (that is after full generalization of the 10-years grammar school) the adopted model solutions.

4.5. <u>The Socialist Republic of Romania (R.)</u>

In 1976/77 in 43 higher schools in Romania studied 174 000 students (including 127 225 at stationary courses, that is 72,7% of the total attendance).

It is expected that in the years 1976-1980 the Romanian higher schools will educate circa 180-200 thousand of specialists, including-according to anticipations-circa 85 thousand of engineers.

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This important development in quantity of higher education will be accompanied by a parallel qualitative progress.

The structure of higher schools and the number of students attending in 1976/77 and 1977/78 is shown on tab.1.

Besides the 4-6 years higher studies, in recent years curtailed vocational courses of 3-years duration are being organized, in particular in technologic and pedagogic fields.

The graduates of the shorter cycles of technological education are awarded the title of sub-engineer. The curricula of the shorter cycles of studies differ fundamentally from those of studies of traditional structure. In the 3-years cycles of technological education are in existance discipline and practical training of a distinctly professional profile, connected with a definite professional work in a definite type of establishment. Stress is put on a good knowledge and mastering of technologies and production processes of medium complexity; while

Tab.1

Specialities	1976/77			1977/78		
	higher schools	Faculties	Students	h.sCh.	Faculties	Stud.
Technologic	13	47	74 763	19	55	87 000
- engineers	x	x	42 843	x	x	55 700
- sub-engineers[1]	x	x	31 929	x	x	31 300
Agricultural	4	13	10 543	4	13	10 000
Economic	1	10	22 782	1	9	22 500
Law	-	4	7 336	-	4	5 800
Medicine/Pharmaceutics	5	17	19 597	5	17	17 000
Pedagogic	13	39	37 150	8	27	34 500
Fine arts	7	9	2 717	7	9	2 200
Total	43	139	174 888	44	134	179 000

1) graduated from the 3-years cycle of higher education.

at the studies in technologic fields, of academic profile, emphasis is laid on a wide theoretical basis, on the preparation to research work and projecting and to the mastering of highly complex technologies and production processes.

From 1974 on are organized in Romania shortened cycles of technological

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education in form of evening courses. Their specific character consists in that they are organized in great industrial establishments' manpower. The curricula are identical to the programme of the 3-years stationary technological studies.

Since 1974/75 in the Romanian higer education new plans and new curricula are in force. They are meant as instruments of the realization of one of the fundamental principles in the Romanian higher education - the integration of education, research work and production. The modifications introduced aim at obtaining a close relationship of the theoretical studies and their practical implications. This aim was achieved through changes of proportions in the syllabuses between theoretical learning (lectures, seminars) and practical work (training, production practices). At all academic years and lines of studies 2-3 months of production practices are obligatory (they are of various duration, for instance the practices for students of early years of study are of 2-6 weeks, while those for students of the IV and V years may be as long as 3-4 months.

In view of an optimum utilisation of the potential in cadres and material equipment of higher schools, at all higher schools are carried into effect subjects of studies non-typical (e.g. technical faculties are introduced at universities, while at technical higher schools exist faculties of human sciences, of physical education etc.)

In 1974 fundamental structural and programme changes were implemented in Romanian higher schools; the purpose of these modifications was to introduce new proportions between general and specialized education. Particular subject-studies have been classed on basis of substantial affinites in the so-called profiles or orientation of higher studies. To each of the essential profiles corresponds a wide dissipline of science (e.g. mathematics, philology electricity). Every essential profile includes a number of narrower disciplines, called specialities. For instance the mathematic profile of study contains following specialities; theoretical mathematics, Informatics and the mathematical-mechanical line. The electric profile is composed of following specialities; electrotechnics, electromechanics, electronics, telecommunication, automation.

In consequence the programme of several semesters of studies at a given profile is common to all students. The learning in the field of chosen speciality begins not before the III or IV year of study. The Romanian theoreticians of education estimate that such structure of curricula assures a greater professional mobility and a possible quick change of speciality.

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The selection for higher education/stationary, correspondence and evening studies) is performed through a competitive entrance examination. The tendency prevails to organize it (in 2-3 disciplines) in written form, considered to be more objective.

To all graduates of higher studies the obligation of a 3 years of work is compulsory. Offers of free posts are notified publicly in the higher schools, and the graduates make their options before a commission of employment, functionning in the school. The choice is made in a fixed order: the graduates with the highest results in studies begin, preceeding others with lower average grades.

Scientific workers are engaged by competition. This concerns all posts, from assistant to professor. Experts in practical experience are also engaged for periods fixed beforehand. This results from the principle of integrating the process of education with the research work and with production work.

The permanently employed scientific workers of higher schools are bound to pass periodically practices in production establishments and/or in research institutes.

At present the higher schools in Romania focus their interest on following problems:

1) Further consolidation of the principle of integration of education, research and production work. This principle forms the widest background of the modernization of the Romanian higer education. It brings a corresponding approach in organizational changes, plans and programmes of higher education.

2) Individual organizational units were called to life, affording to students and scientific workers possibilities of production work, projecting and research work. The said units are, as a rule, part of the structure of higher schools, and operating on clearing principle for services they are rendering to enterprizes. Practical learning finds its equivalent in teaching-hours included in plans and syllabuses.

Production and research work is conducted by students of senior years, who, in-cooperation with their teachers, execute definite tasks.

3) Educational work at the higher schools is constantly intensified in depth, as well regarding the realm of studies compatible with syllabuses, as the methods of presenting the contents of a study. A homogenous system of teaching in social sciences is adopted in Romanian higher schools, with

stress laid upon the improvement of their ideologic contents and their didactic methods and relevance to the social and economic policy of the country.

4) The recent years are characterized by a dynamic progress in the development of shorter cycles of higher education.
The development of this form of education at engineering studies (day and evening studies and evening forms at industrial establishments) corresponds tothe differentiated need of employers for highly qualified man-power.

4.6. People's Hungarian Republic

In 56 higher schools - 110.528 of students have been studying in Hungary in the year 1976-1977.
In 1972 they started to elaborate the basic reform of the whole system of education, including higher schools.
Studies and researche on the reform aim to make the analysis and the evaluation of the actual level of the education and to prepare new changes till the year 1980.

In the half of 90-ties, on the base of the analysis, they intend to realise the full reform of the Hungarian system of education. Specialists have been called up to prepare the concept of the reform. The methodological base for the analysis is already finished up; special sous-commissions are dealing with groups of details problems connected with the reform.

The quantitative and qualitative growth of the Hungarian system of education is said as quite sufficient. That means, that till 1985 the amount of students enrolled in the 1st year of studies will not be increased /about 16.500 students for full-time studies/. They don't intend to make greater changes in the amount of higher schools, even after 1985, when the number of students enrolled in full-time studies will be increased of more than 2500-3000 of students.

The mentioned evaluation of the hungarian higher education system and his further development allows the heading staff of higher schools to concentrate on the quality of the education.

The structure of the hungarian system of education will be slightly modified, however. They observe, for example, that there is quite sufficient number of graduate specialists in the agriculture/rual inhabitants of Hungary constitute less than 18% of the total number of the population;

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they provide that in 2000 -this percentage will be diminished till 8%. In the pedagogy, on the contrary, there is too small number of graduates. It is the consequence of demographic changes in 1985/86 - 300.000 more of children than in 1977/78 will attend to primary schools - what makes 30% of increase/.

They plan than, to increase the number of students on pedagogical studies, not increasing the total number of students however.

In 1977 one could observe the more effective state help for research work, especially in disciplines recognized as extreemly important for the country. It is stressed, that the develpment of research works and their level, can also be a way to improve the process of the education in universities. They are still working to elaborate more effective forms of cooperation between universities, research institutes - in order to improve research and pedagogical work of the college. This goal is intended also to realise -by the change of the inner structure of the high school. Instead of numerous and small professorships/ in 1978 there were about 1300 of them, with about 13.000 of didactic and research staff/they intend to create bigger organised bodies in the faculty' frame. This change is thought to be more effective in research and pedagogical education, the more -development of scientific disciplines.

The opinion of hungarian experts is that the outrageous increase of the scientific and technical information is directly connected with the integrated and complex system of education in congenial branches of knowledge.

They press also to change the old structure of the high school/professorships/-into the modern and elastic organisation. This idea is not popular among the majority of university staff, however.

The differentiation of professions have caused the differentiation of studies. Besides traditional universities and colleges with academic education -there are also organised vocational, 3 years' studies.

Actual works on hungarian higher education are concentrated on the following problems:

1. the better effectiveness of the system of education - in a way of modernisation the structure and programmes of studies

2. the development of 2-steps structure of higher studies /I - academic studies, II vocational studies/. They started also to prepare and realise the IIIth step : post-graduated 2 years university studies.

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3. the idea of research work development connected with socio-economic problems of the country.

4. the better system of the enrolment in studies/from 1973/4 they have led up only 1 exam, which is simultaneously final and entrance exam. Each student is also obliged to pass so called "integrated" exams/that means some disciplines of a chosen profile of study/.
In order to help young people of workers' or peasants' background to enter to high school, the special system of preparation courses is organised in the whole country.
There are also courses for those, who have not the final school exam; finishing a course is sufficient to be admitted for some kind of studies.

5. From 1977 - for students graduated in some kind of studies/physicians, stomatologists, pharmacists, pedagogues, lawyers/ there is a new rule: during 3 years after finishing their studies they are obliged to start the work/in a way of competition/in view of supplying highly qualified specialists to these parts of the country where there are actually needed.

4.7. Union of Socialist Soviet Republics (U.S.S.R.)

In 1976/77 there were in U.S.S.R. 859 institutions of higher education with 4950.2 thousand students (including 2711 thousand - 54.8% -full time students).

In 1978 95 million Soviet citizens benefited from various forms of education. Among them 4.7 mln attended technical secondary schools and other professional secondary schools. Institutions of higher had 5.1. mln students. In the same year 771 thousand university graduates were employed, 1026 thousand students started their first year of studies, including 624 thousand in full-time studies.

In 1978 the number of research workers was 1.3 mln.

In 1978/79 the Soviet Union had 867 institutions of higher education.

Due to the constant growth of higher education, the Soviet authorities of this level of education pay great attention to improving quality of instruction in universitites. With this aim, the Council of Ministers of the U.S.S.R. in January 1978 came to a decision on "Improvement of training of specialists and betterment of utilization of university graduates and

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professional secondary school leavers in the national economy".
The document stipulates preparation of vocational characteristics for all fields of study. This will allow for system approach to determination of educational contents, number of graduates necessary for the country, their appropriate employment and full use of qualifications acquired through the studies.

This is a meaningful factor of the scientific organization of higher education in the U.S.S.R.

At present, according to the adopted in U.S.S.R. principles of planning of the socio-economic development, works are conducted on the plan of development of higher education up to 1990 and the forecasts regarding this matter are made up to the year 2000.

For some time, the Soviet universities realize the principle of a broad profile of education based first of all on fundamental sciences and linking instructional process with research.

A principal part in the Soviet system of higher education is played by universities which can be found in all constituent republics, autonomous republics and in great economic and cultural centers. The universities tend to fulfill the functions of scientific and methodological centers for other institutions of higher learning of a given region.

In U.S.S.R. the most numerous are gradutes of technical studies -over 40% of a total number. Growing fast is also education of economists.

Teachers are trained in 200 teacher training institutes and in most universities. Professional school teachers are instructed in 26 higher schools (these teachers are generally engineers with pedagogical specialization).

Recently, in U.S.S.R. great attention is paid to the improvement of the system of up-grading qualifications of the personnel managing economic and social life of the country. The system includes 57 institutions of higher education and their 82 branches, 13 faculties of up-grading qualifications and more than 400 specialist courses. Each year it serves some 1.5 million managers.

Post-graduate studies are designed mostly to prepare higher school graduates to work in new fields of science, technology, economics, etc., according to the present needs of the labor market. For example in 1978, the post-graduate studies were held in automation of experimental research, physics and technique of magnetic memory, special magnetic techniques, new construction materials, natural environment protection, ecology, designing automation, etc.

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Soviet higher education has great experience in preparing its graduates to the social life in the spirit of the socialist ideals. Social sciences (the history of the Communist Party of the Soviet Union, dialectical and historical materialism, political economy, scientific communism) play crucial role in their training. Students participate in a variety of character building activities, such as social practices, competitions of students works in the field of social sciences, student brigades.

Soviet institutions of higher education develop intensively research activity; they gather almost 50% of scientists and scholars of the country. Research in universities concentrate mainly on fundamental sciences. Still, the number of problems solved in applied sciences, namely in the field of scientific and technological progress, is growing fast. The development of research promotes not only improvement of teaching process in universities but also up-grading the level and scientific qualifications of the faculty (in 1977, 740 faculty members were awarded the degree of doctor, and 6 300 persons with the degree of candidate of sciences).

Now, Soviet higher education focus its attention on the following tasks:

1. Further development of research and their implementation in the field of scientific organization of higher education (particularly in the scientific organization of instructional process and automatic systems of university management).

2. Intensification of instructional process through linking teaching with research, utilization of the latest technical teaching media (television and computers), betterment of didactic methods aiming at student activity, self-dependence and self-education. An important role is played here by pedagogical experiments widely propagated in the Soviet institutions of higher learning.

3. Improvement of the system of education of scientific staff, particularl of various forms of "aspirantura" as a main way to the profession of a research worker and academic teacher.
Pedagogical and psychological training covers more and more staff.

4. Constant development of the system of improvement of managing personnel and of the system of post-graduate studies (intended for up-grading of qualification in the fields of new achievements of science and technology).

5. Development of research in higher schools particularly of those serving directly the national economy and culture.

6. Modernization and development of the material basis of higher education, mainly of didactic facilities, scientific and instructional laboratorie and of social infrastructure.

7. Improvement of the system of scientific planning and forecasting in higher education, and of the system of managing higher education and institutions of higher education (with the aid of automated systems).

4.8. Belorussian Soviet Socialist Republic

Belorussian S.S.R was founded on January the 1st 1919. Since 1922 the Republic has been a part of the Soviet Union. It covers an area of 207.6 thousand km^2, the population is some 10 million. The capital of Belorussia is Minsk.

With the establishment of the United Nations, the Belorussian S.S.R. was given a seat in the general assembly of that body.

In 1976 in 31 Belorussian institutions of higher education were attended by over 165 thousand students. In the same year 25.8 thousand students graduated from universities. In 1976 more than 35 thousand candidates were admitted to the 1st year (including 23.6 thousand to the full-time studies).

To compare - in 1941 in the Belorussian S.S.R. there were 25 institutions of higher education with 21 thousand students, in 1973 - 29 institutions with 148.7 thousand students.

In 1975 there were the following principal academic centers in Belorussia:

Name of institution	Number of students	Admitted to the 1st year	Number of graduates
The Belorussian State University in Minsk	17 275	3 370	3 114
The State University in Gomel	7 025	1 496	1 024
The Belorussian Technical University in Minsk	22 422	4 799	3 104

In 1936/39 in Belorussia there were 31 students per 10 00 inhabitants (in the U.S.S.R. the ratio was 35: 10 000). In 1975/76 the same ratio was 171 students per 10 thousand inhabitants.

In 1978 a new university was set up in Grodno in the place of the former higher pedagogical school.

Higher education in Belorussia is subordinated to the Ministry of Higher and Special Secondary Education of the Belorussian S.S.R. Some institutions (so-called all Union) are under the authority of the Ministry of Higher Education of the U.S.S.R. Some classes in universities are held in Belorussia and the remaining in Russian.

4.9. Ukranian Soviet Socialist Republic

Ukranian S.S.R. was set up in December 1917. It covers a territory of 603.7 thousand km^2, population is 50 mln. Its capital is Kiev - main political and administration center and the largest academic center of Ukraine. The Ukranian S.S.R. is a member of the United Nations Organization.

In 1976 there were 143 institutions of higher education with 844.4 thousand students. In the same year 134 thousand graduates completed higher studies, and the students admitted to the 1st year of study counted 170 thousand (including 104 thousand full-time students).

In 1975 the Ukranian Soviet Socialist Republic had the following academic centers:

Name of institution	Number of students	Students admitted to 1st year	Number of graduates
The State University of Dnepropetrovsk	12 442	2 302	2 053
The State University of in Donetsk	11 136	1 939	2 200
The State University in Kiev	19 315	3 473	3 625
The State University in Lvov	12 106	2 266	2 005
The State University in Odessa	11 149	2 022	1 767
The State University in Uzzhorod	10 453	1 864	1 377
The State University in Kharrkov	11 779	2 302	2 008
The State University in Chernikov	10 001	1 959	1 422
The Technical University of Kiev	25 577	4 390	3 682
The Technical University of Lvov	24 312	4 367	3 699
The Technical University of Kharkov	20 339	4 100	2 416

The increase of the development of higher education is characterized by the following data:

Academic year	1914/15	1927/28	1940/41	1975/76
Name of institutions	27	39	73	142
Number of students (in thous.)	35.2	29.1	196.8	831.3

In 1914/15 there were 10 students per 10 000 inhabitants, in 1940/41 the same ratio was 47: 10 000, and in 1975/76 169: 10 000.

The Ukranian higher education is subordinated to the Ministry of Higher and Secondary Special Education of the Ukranian S.S.R. Some all Union institutions are under the authority of the Ministry of Higher Education of the U.S.S.R. Classes in universitites are held partially in Ukranian. Academic handbooks and didactic aids for the faculty are also published in Ukranian.